Appendix 27

Unsuitability for Mining Document: Federal Lands in the Price Management Area

Introduction

As part of the objectives of the Federal Government to provide for leasing of coal under the Mineral Leasing Act of 1920, as amended, regulations were established to provide policy and procedures for considering development of coal deposits through a leasing system involving land use planning and environmental analysis. This document summarizes the federal coal management decisions for the planning area and documents the unsuitability criteria applied to potential coal lands for future development. A brief summary of the process used to arrive at the coal management decisions is briefly explained. This summary is intended to help the public understand the federal coal management program, as it applies to the planning area, and to show the requirements that must be met under the regulations at 43 CFR 3400. These planning decisions will guide the development of the federal coal resource in this area for the next 15 to 20 years.

To implement competitive coal leasing under the regulations contained in 43 CFR 3420, the BLM established, in 1979, a number of federal coal production regions. The coal fields within this planning area are included in the Uinta-Southwestern Utah Coal Region. A regional coal team was established to guide the competitive leasing process in the region. Initially, coal leasing was to be implemented through a regional leasing process where potential coal tracts were delineated, ranked, and offered for lease to meet leasing targets established by the Secretary of the Interior. Later, the Department recognized that most coal leases were being offered as maintenance tracts for existing operations. Therefore, the Unita-Southwestern Utah Coal Region was decertified and a decision was made to continue leasing using the leasing on application procedures outlined in 43 CFR 3425. Presently, coal tracts are leased in response to applications initiated by industry.

Coal Planning Process

The major component to guide the Secretary on making coal leasing decisions is the land use plan. Identification of areas acceptable for further consideration for coal leasing is a major land use planning decision. These lands for further consideration shall be identified through a screening process (43 CFR 3420.1-4). The first step in this process identifies only lands that have coal development potential. The second step is to review Federal lands during land use planning to assess where there are areas unsuitable for all or stipulated methods of mining using the unsuitability criteria set forth in 43 CFR 3461. The third step evaluates multiple land use decisions (trade-offs) that may eliminate lands from leasing that contain resources presently deemed more important that coal. The fourth step requires surface owner consultation for private surface lands overlying Federal coal.

For the Price RMP, the lands identified as being suitable for further consideration for leasing were identified using the following steps and criterion:

Step 1: Identification of Coal Development Potential.

Lands in the planning area that have coal development potential are shown in map 41 of the Coal Resources Report (Tabet, 2003) as colored areas showing development in two time frames, 2003-2017 and 2018-2032. These combined areas constitute the identification of coal development potential for the time frame of this planning effort. Included in these potential areas are current coal leases and unleased Federal coal where we believe development may occur by 2032. These are the areas that will be brought forward for the coal unsuitability review.

Step 2: Unsuitability Review

For those lands that have been identified as having development potential, BLM reviews whether these lands can be considered suitable for development through consideration of 20 criteria (based mostly on resource values) as outlined in 43 CFR 3461. These criteria were applied in a broad sense in the previous land use plans (San Rafael RMP and Price River MFP with coal amendments). The current planning effort will carry forward unchanged unsuitability determinations from the previous reviews. In addition, much of the Wasatch Plateau coal field, except the northeast corner, is under National Forest system lands and unsuitability has been addressed in the Land and Resource Management Plan that was prepared by the Manti-La Sal National Forest in 1986.

In applying each criterion to the high development potential lands, the phrase "shall be considered unsuitable" is to be shorthand for "shall be considered unsuitable for all or certain stipulated methods of coal mining involving surface coal mining operations". Some criterion have exceptions or exemptions as listed in the regulations. If the exemption or exception for a specific criterion can be applied, the coal lands being evaluated would not be considered unsuitable and could be considered for leasing. The regulations outlining the procedures for unsuitability determinations provide, "Federal lands with coal deposits that would be mined by underground mining methods shall not be assessed as unsuitable where there would be no surface coal mining operations (43 CFR 3461.1 (a)). Surface coal mining operations as defined in 43 CFR 3400.0-5 (mm) "means activities conducted on the surface of lands in connection with a surface coal mine or surface operations and surface impacts incident to an underground mine".

In other words, unsuitability criteria will be applied to all coal lands that have potential to be recovered by surface mining methods (i.e., where earthen material above the coal beds is physically moved to access the coal beds along with areas where associated support facilities and structures are located). "Surface operations and surface impacts" applies to underground mines for the support facilities and structures built on the surface and the surface disturbance that it causes. Therefore, lands will generally be considered to be unsuitable for further consideration for leasing if the expected mining activities would

result in direct impacts to the surface. Because most of the areas identified as having development potential represent deep coal deposits with no clearly defined areas where surface impacts would occur, the unsuitability criteria will not be applied to the lands where the deposits will be developed only through underground mining.

For this planning effort, the unsuitability criteria were applied to the areas with development potential that could possibly be developed using surface mining methods. In this, the areas for assessment are significantly reduced. Except for one small 120 acre parcel in the Wasatch Plateau, all the coal in the Book Cliffs and Wasatch Plateau coal fields where development is anticipated is deep with little potential for surface facilities. The Emery coal field along the southwest border of the planning area has some areas with surface mining potential in the flat lands south of the town of Emery known as Walker Flat. The coal report (Tabet, 2003) did not identify this area as having development potential, but the State of Utah expressed interest in obtaining these lands through an exchange. This indicates that these lands could possibly be developed in the life of the plan.

CRITERION 1

All Federal lands included in the following land systems or categories shall be considered unsuitable: National Park System, National Wildlife Refuge System, National System of Trails, National Wilderness Preservation System, National Recreation Areas, land acquired with money derived from the Land and Water Conservation Fund, National Forests, and Federal lands in incorporated cities, town, and villages.

Analysis

With the exception of National Forest lands, there are no lands within the planning area that include any of the stated land systems or categories. The National Forest system lands overlay much of the Wasatch Plateau coal field and the unsuitability criteria were applied through preparation of the 1986 Forest Plan. For the National Forest lands, an exception to this unsuitability criterion would apply because any potential surface impacts and operations will be incident to an underground mine. In the San Rafael RMP, 160 acres of federal lands that are incorporated within the town of Emery, Emery County, Utah were identified as unsuitable. These unsuitable acres are outside the current potential development area but inside the Emery KRCRA. It is not likely that these lands will be developed during the planning period. However this unsuitable determination should be continued at this time as even underground mining under these 160 acres (used for water storage tanks and communication sites) would not be desirable. Negotiations were underway to title the land over to private ownership but the outcome is not final at this time.

CRITERION 2

Federal lands that are within rights-of-way or easements or within surface leases for residential, commercial, industrial, or other public purposes, on federally owned surface shall be considered unsuitable.

Analysis

No coal lands under any rights-of-way or easements across the Book Cliffs coal field and the public land area of the Wasatch Plateau coal field were found to be unsuitable due to the underground mining exemption. The Emery coal field inside the planning area has one right-of-way in the Walker Flat surface mining potential area. However, this right-of-way was for a power line for mining purposes to the reclaimed Dog Valley Mine and the line has now been removed. Thus this right-of-way fits the exceptions (ii) and (iii) in that the line was for mining purposes and the purpose for the right-of-way is not being used.

CRITERION 3

Federal land affected by Section 522(e) (4) and (5) of SMCRA shall be considered unsuitable. This includes lands within 100 feet of the outside line of the right-of-way of a public highway or within 100 feet of a cemetery, or within 350 feet of any occupied public building, school, church, community or institutional building or public park or within 300 feet of an occupied building.

Analysis

No coal lands were found unsuitable in the Book Cliffs coal field and the public land area of the Wasatch Plateau coal field due to the underground mining exemption. Highways I-70 and U-10 cross about 2 and 3.5 miles respectively from public lands above the Emery coal field that may be potentially mined by surface mining methods. Highway I-70 (500-foot-wide right-of-way), Highway U-10 (400 foot right-of-way), and the lands within 100 feet of the outside line of both right-of-way are unsuitable for surface mining.

They may be suitable for leasing with stipulations to protect these public highways from any damage associated with underground mining. About 7 miles of other public roads cross over the Emery coal field that may be potentially mined by surface mining methods. These could be unsuitable for surface mining within 100 feet of the outside line of the right-of-way of the public road. No cemeteries, public buildings, schools, churches, community or institutional buildings, public parks, or occupied dwellings are known to exist on any public lands overlying the high potential development areas of any of the coal fields.

CRITERION 4

Federal lands designated as wilderness study areas (WSAs) shall be considered unsuitable while under review by the Administration and the Congress for possible wilderness designation.

Analysis

No WSAs exist in the Wasatch Plateau or Emery coal fields. Approximately 445 acres of the Turtle Canyon WSA overlies a high development potential area of the Book Cliffs coal field. This is the Lila Canyon/Little Park lease area located at the furthest southeast portion of the coal field. Of these 445 acres, 139 acres is already under lease and is subject to valid existing rights. The other 306 acres of unleased Federal coal with high development potential is not assessed unsuitable due to the underground mining exemption particularly because the coal under this area is deep (1500+ feet) and cannot be surface mined. However, under the third screen for further leasing considerations, the BLM policy as established under the Wilderness IMP withdraws all mineral leasing from WSAs and as such, 306 acres of the Book Cliffs coal field is withdraw from further consideration for coal leasing due to WSAs.

CRITERION 5

Scenic federal lands designated by visual resource management (VRM) analysis as class I (an area of outstanding scenic quality or high visual sensitivity) but not currently on the National Register of Natural Landmarks shall be considered unsuitable.

Analysis

No lands were found unsuitable in the Book Cliffs coal field and the public lands of the Wasatch Plateau coal field due to the underground mining exemption. About 160 acres of public lands along the I-70 corridor overlying the Emery coal field that has potential for surface mining methods, are identified under the No Action and C alternatives as VRM class I areas. VRM class I areas are unsuitable for surface coal mining methods with the exception that a lease may be issued if the surface management agency determines that surface coal mining operations will not significantly diminish or adversely affect the scenic quality of the designated area.

CRITERION 6

Federal lands under permit by the surface management agency and being used for scientific studies involving food or fiber production, natural resources or technology demonstrations and experiments shall be considered unsuitable for the duration of the study, demonstration or experiment, except where mining could be conducted in such a way as to enhance or not jeopardize the purposes of the study, as determined by the surface management agency, or where the principal scientific user or agency give written concurrence to all or certain methods of mining.

Analysis

No lands under any of the coal fields are being used for these types of studies.

All publicly owned places on federal lands which are included in the National Register of Historic Places shall be considered unsuitable. This shall include any areas that the surface management agency determines, after consultation with the Advisory Council on Historic Preservation and the State Preservation Office, are necessary to protect the inherent values of the property that made it eligible for listing in the National Register.

Analysis

No known sites are within the three coal fields with high development potential. The Rochester-Muddy petroglyph site is on the National Register of Historic Places. This site is in the Emery coal fields but outside the area of any potential development. This site was assessed as unsuitable for surface mining methods in the San Rafael RMP. This site should be brought forward in this planning effort with the same prescriptions, which is: suitable for further leasing but with no surface disturbance within 0.25 miles of the site and no under ground mining will be allowed within this 0.25 mile buffer without consultation with the Advisory Council on Historic Preservation and State Historic Preservation Office.

CRITERION 8

Federal lands designated as natural areas or as National Natural Landmarks shall be considered unsuitable

Analysis

There are no Federal lands within the three coal fields with high development potential that are designated as national natural landmarks.

CRITERION 9

Federally designated critical habitat for threatened or endangered (T/E) plant and animal species, and habitat for federal T/E species which is determined by the Fish and Wildlife Service (USFWS) and the surface management agency to be of essential value and where the presence of T/E species has been scientifically documented, shall be considered unsuitable.

Analysis

Some areas of T/E species and/or habitat overly areas of the Book Cliffs coal field. However, the underground mining exemption applies to these lands. No T/E species and/or habitat overly areas of the Emery coal field with surface mining methods potential.

Federal lands containing habitat determined critical or essential for plant or animal species listed as T/E by the state pursuant to state law shall be considered unsuitable.

Analysis

No areas of critical habitat for state designated T/E species overly any of the coal fields. This will need to be reviewed in the future and prior to leasing.)

CRITERION 11

A bald or golden eagle nest or site on Federal lands that is determined to be active and an appropriate buffer zone of land around the nest site shall be considered unsuitable. Consideration of availability of habitat for prey species and of terrain shall be included in the determination of buffer zones. Buffer zones shall be determined in consultation with the Fish and Wildlife Service.

Analysis

Some known active golden eagle nest sites are on the Book Cliffs and public lands on the Wasatch Plateau coal fields. These sites were not declared unsuitable due to the underground mining exemption. No known active golden eagle nest sites are located in the potential surface mining area of the Emery coal field. Future leasing near or including active golden eagle nests will have surface disturbance conditions imposed for buffer zones around active eagle nest sites.

CRITERION 12

Bald and golden eagle roost and concentration areas on Federal lands used during migration and wintering shall be considered unsuitable.

Analysis

No known bald or golden eagle roosts or concentration areas exist within the three coal fields. Eagles do visit the area during the winter, but no critical habitat areas have been identified.

Federal lands containing a falcon (excluding kestrel) cliff nesting site with an active nest and a buffer zone of Federal land around the nest site shall be considered unsuitable. Consideration of availability of habitat for prey species and of terrain shall be included in the determination of buffer zones. Buffer zones shall be determined in consultation with the Fish and Wildlife Service.

Analysis

There are known nest sites on the Book Cliffs and public lands of the Wasatch Plateau coal fields. These lands were not declared unsuitable due to the underground mining exemption. Known nest sites also occur in the Emery coal fields (analysis of actual number and sites is not yet complete). The nest sites and buffer zones around the sites are unsuitable for surface mining. These areas are suitable for future leasing with imposed surface disturbance restrictions around the nest sites.

CRITERION 14

Federal lands that are high priority habitat for migratory bird species of high federal interest on a regional or national basis, as determined jointly by the surface management agency and USFWS, shall be considered unsuitable.

<u>Analysis</u>

Migratory bird species of high federal interest are found or have the potential to occur within the three coal fields. These lands were not declared unsuitable due to the underground mining exemption. Areas of high priority habitat for migratory bird species are suitable for future leasing but with stipulations to protect habitat from surface disturbances.

CRITERION 15

Federal lands which the surface management agency and the state jointly agree are fish and wildlife habitat for resident species of high interest to the state, and which are essential for maintaining these priority wildlife species, shall be considered unsuitable.

Examples of such lands which serve a critical function for the species involved include: (i) active dancing and strutting grounds for sage grouse, sharp-tailed grouse, and prairie chicken; (ii) winter ranges crucial for deer, antelope, and elk; (iii) migration corridor for elk; and (iv) extremes of range for plant species.

<u>Analysis</u>

Federal lands in riverine, coastal and special floodplains (100-year recurrence interval) on which the surface management agency determines that mining could not be undertaken without substantial threat of loss of life or property shall be considered unsuitable for all or certain stipulated methods of mining.

Analysis

There are no lands in the high coal development potential areas of the Book Cliffs coal field that underlie lands with this criterion. Public lands in the Wasatch Plateau coal fields and the Emery coal field are not unsuitable for mining due to the underground mining exemption.

There are about 60 acres of public land within the surface mining potential area of the Emery coal field, which are in the 100-year flood plain of Ivie Creek. These acres are unsuitable for surface mining. However, future leasing for surface mining could occur with special stipulations to protect life and property within these flood plains.

CRITERION 17

Federal lands which have been committed by the surface management agency to use as municipal watersheds shall be considered unsuitable.

Analysis

There are some public lands inside the Book Cliffs coal field that have been committed by BLM as municipal watersheds. These lands are not unsuitable due to the underground mining exemption. Likewise with public lands within the Wasatch Plateau coal field. Municipal watersheds for Huntington, Orangeville, and Ferron are on some public lands within this coal field but outside the Forest boundary. Again these lands are either already under coal leases or not unsuitable due to the underground mining exemption. No lands in the Emery coal field are within any committed municipal watersheds.

CRITERION 18

Federal lands with national resource waters, as identified by states in their water quality management plans, and a buffer zone of federal lands 0.25 mile from the outer edge of the far banks of the water, shall be unsuitable.

<u>Analysis</u>

The Utah Division of Water Resources has not identified any federal lands with national resource waters.

Federal lands identified by the surface management agency, in consultation with the state in which they are located, as alluvial valley floors according to the definition in 43 CFR 3400.0-5 (a) of this title, the standards in 30 CFR Part 822, the final alluvial valley floor guidelines of the Office of Surface Mining Reclamation and Enforcement when published, and approved state programs under the Surface Mining Control and Reclamation Act of 1977, where mining would interrupt, discontinue, or preclude farming, shall be considered unsuitable. Additionally, when mining Federal land outside and alluvial valley floor would materially damage the quantity or quality of water in surface or underground water systems that would supply alluvial valley floors, the land shall be considered unsuitable.

Analysis

No alluvial valley floors overlay federal coal lands of either the Book Cliffs coal field or the public lands of the Wasatch Plateau coal field. The Office of Surface Mining Reclamation and Enforcement tentatively identified 300 acres of BLM land as alluvial valley floor along Muddy, Quitchupah, and Ivie Creeks that are within the Emery coal field but outside the Emery potential surface mining area. These lands are not unsuitable for surface mining due to the underground mining exemption. These tentatively identified alluvial valley floors are suitable for future coal leasing with stipulations to ensure the underground mining would not "...interrupt, discontinue, or preclude farming..." of these areas (quotation from prior paragraph).

CRITERION 20

Federal lands in a state to which is applicable a criterion (i) proposed by the state or Indian tribe located in the planning area, and (ii) adopted by rulemaking by the Secretary, shall be considered unsuitable.

Analysis

An Indian tribe nor the State of Utah have proposed and the Secretary has not adopted any other criteria.

Note: A small (about 120 acres) parcel of Federal coal lands that lie in the Wasatch Plateau coal fields but outside the National Forest, has potential for development with surface mining methods. The area is located aside Pleasant Valley near Clear Creek, Carbon County, Utah. No unsuitability assessment was analyzed as the surface estate is privately held and outside the purview of Federal unsuitability. Future consideration for coal leasing on this tract moves to screen # 4, surface-owner consultation.